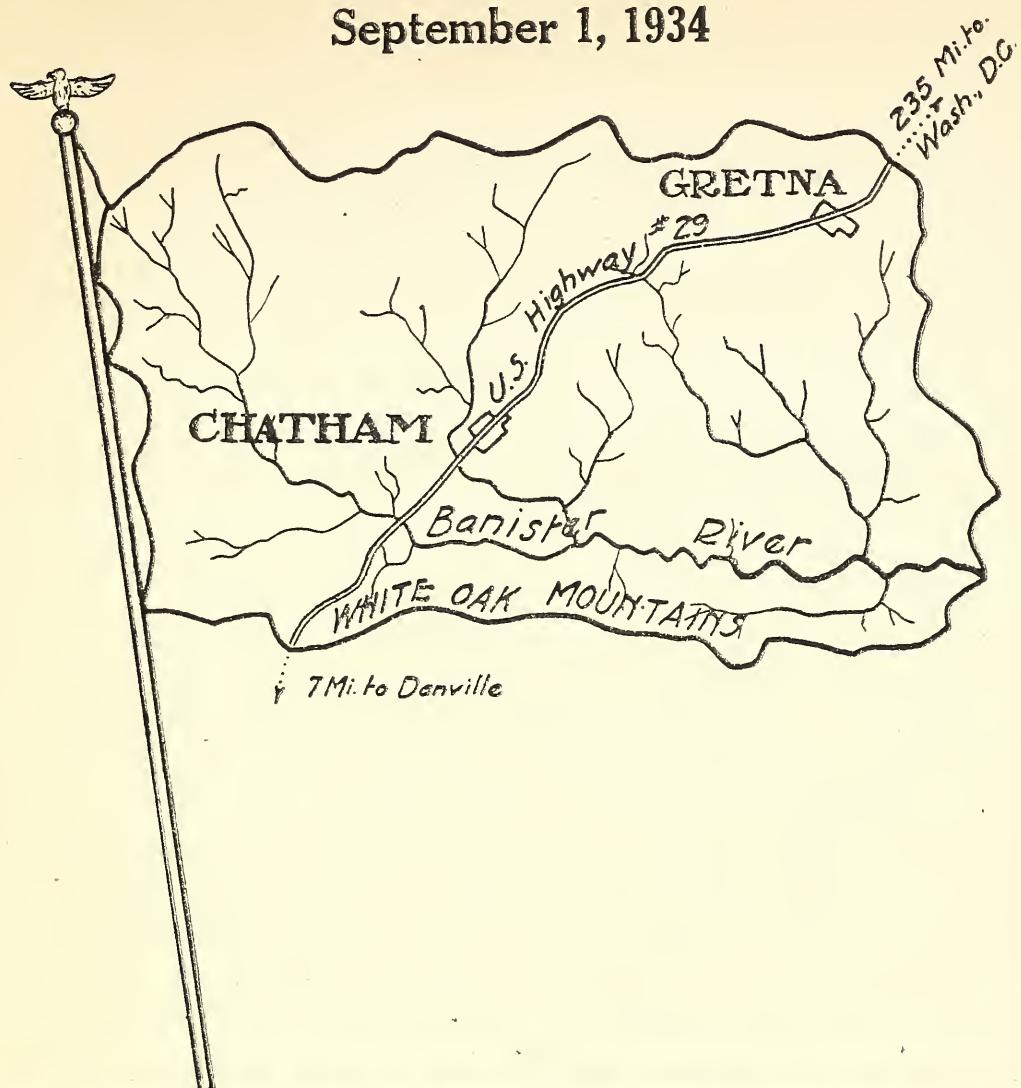


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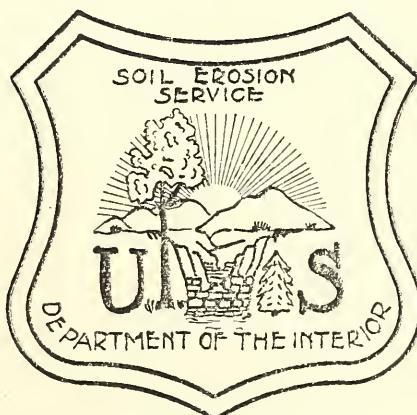
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September 1, 1934



# Banister River Banner



V.1, no. 21

CHATHAM, VIRGINIA

## FOREWORD

Last month you were introduced to the Soil Erosion Service and told what we hope to accomplish working with you. Naturally, you want to know what we have been doing in the meantime. We are still more anxious for you to know. In detailed form this information is to be given to you each month. It is the wish of the Soil Erosion Service that you give constructive criticism freely. If you don't like our plan, tell us about it.

## OUR PLANS

In the last issue, you were acquainted with our program by the departments. Here it is well to try to provide you with a composite picture of the goal of the project.

Since the damage done by erosion in the Piedmont country is not one of abuse alone, it is manifestly impractical to try to restore a natural balance by the work of any one agency. Forests have been removed from hillsides that were unsuitable to cultivation. Common sense dictates that these forests should go back. Trained foresters are, therefore, provided and trees will be furnished to help you put these slopes back in timber. Mechanical assistance must be rendered in combating erosion on cultivated fields. Trained engineers are on the ground to meet this need. Different rotations must be planned and put into execution to retard soil erosion on the parts of farms not in forests. To meet this need, trained men familiar with the farmers' needs and practices of the region are provided. To further strengthen this plan, limited quantities of lime, fertilizer and seed will be allowed farmers who cooperate and who keep faith. In order to proceed with a full knowledge of the territory, the soils must be classified as to type, slope, and degree of erosion. Soils men are now rapidly mapping the area. With this information available and by means of farm visits by members of the staff, complete plans for the protection of the nation's chief asset, the soil, can be presented to you.

First, the farms are mapped by the soils men. Then, upon receipt of a written invitation, the farms are visited by agronomists and erosion specialists, and each field gone over. Recommendations are then made, based upon the soil type, slope of land, the degree of erosion, and your plans for the future. You are then told how, in our opinion, you can best utilize your land to protect it from washing.

In future years it is our hope that this area will present a picture of comfortable homes and well kept farms; that forests will be where forests should grow; that pastures will occupy the steeper slopes not in woodlands; that tobacco will be grown on the fields adapted to producing good quality tobacco; and that an entirely different system of farming will be applied to the rest of each farm not in tobacco rotation. Flue cured tobacco is naturally opposed to the highly fertile soil loved by corn, grass, and the hay crops. It is our hope that working together, we may make the rest of these farms fertile and not impair the value of our tobacco land. Hand in hand with this goes a better balanced system of living. More live-stock, better gardens, in short, that well balanced system of farming that stands as a barrier between men and the frequent poverty brought on by any one crop system in farming.

MISUNDERSTANDINGS

All permanent work is likely to be misunderstood. A scrap of information gleaned here and there, plus hasty conclusions, sometimes will so change the complexion of a plan that its originator would scarcely recognize it clothed in its new garments. No one is optimistic enough to hope that the Soil Erosion Service will escape. Rumors will penetrate neighborhoods giving rise to adverse opinions of our work. On the other hand we are sometimes expected to perform the impossible. We are limited in the first place, by man's inability to completely conquer nature. We might sometimes be more handicapped by the complete lack of cooperation on the part of the farmer. The further you go with us, the further we can go with you. We are anxious to acquaint you with our purpose. In all events, the proper place to get your information concerning our work is from our staff.

HOW TO SECURE AID

It is the policy of the Soil Erosion Service to visit a farm as soon as it is possible, after a written invitation has been received. Invitation blanks were mailed out with our first issue of the Banner. If you were overlooked, let us know and we will be glad to mail you one. Upon checking over our invitations with our maps, we find that certain points in the area seem to be lagging. Territory between Strawberry Creek and Morris Branch, a space around Flint Hill, some territory between Jones' Mill and Pleasant Gap, a considerable strip along the southern boundary of the area running from Pleasant Gap to Shockoe, an area on the upper waters of Wet Sleeve Branch, and various small neighborhoods, are not yet represented. It should be borne in mind that the sooner you establish contact with our staff, the earlier development may be started on your farm.

WHAT OTHERS THINK OF SOIL EROSION SERVICE

Mr. P. G. Cocke and Mr. E. W. Cocke, two good farmers between Piney Fork and Gretna, state that they are already following the cropping plans recommended by the Soil Erosion Service, and they say these plans might well be adopted by every farmer of Piedmont Virginia. Their farms will certainly bear inspection and prove the truth of their assertion.

Mr. A. L. Yeatts, living out on the Climax road, states that he is highly pleased with work done on his property. Mr. Yeatts particularly liked the spirit of the men working on his farm and was immensely pleased by their efforts of cooperation.

Mr. W. L. Blair, located on the Climax road also, bears the distinction of being the first speaking supporter of the S.E.S. While at one of the preliminary meetings, Mr. Blair pleaded for this area to be selected for demonstration purposes. Since then Mr. Blair has been a constant supporter of our services and is completely satisfied with the work done on his farm.

One of our farmers, Mr. M. T. Fitzgerald, Chalk Level road, who looked unfavorably on terracing had a complete change of mind after viewing the terracing operations furnished by our service. He now wants his whole farm terraced. Don't worry, Mr. Fitzgerald, we will do everything we possibly can to help you.

Mr. J. H. Adkins of Chatham, Virginia, has recently acquired a farm near GreenPond, and is very anxious for the S.E.S. to start work on this place. He says, "I want you men to go to work on my farm at the very earliest possible date." He added, "I don't believe the most enthusiastic supporter of the Soil Erosion Service realizes yet the ultimate benefit he is going to receive from this work."

#### AGRONOMY DEPARTMENT

Most of the grass seed for fall seeding has been received, and ready for distribution as soon as the report of the germination test has been received. Farmers will be notified when to come for it.

Wire, which was allotted for pasture fencing, will also be ready for distribution with the seed.

Arrangements are being made to secure the lime as called for in the Cooperative Agreements, but as these arrangements have not been completed, more information about this will be given later.

Relief seed - The Federal Surplus Relief Corporation has given to our project a liberal quantity of grass seed which is not used on farms of the tract, but is to be seeded by relief labor. It occurred to us that this would be a good opportunity to get school grounds and other public lands seeded, provided some form of relief labor was available to do the seeding. Following up this idea, we are advising each school community to take advantage of the offer if they wish. Approximately 50 schools of the county have made requests for the seed, and have agreed to furnish team, fertilizer and manure for the grounds.

Seeding hay and pastures - The Cooperators of the Banister River project should plan to seed as much of their pastures and meadow mixtures this fall as possible. Some of the land, on which this is to be seeded, will have to be fallowed while some of it may be prepared by discing. The method should be used which will put the land in satisfactory condition with the least labor. If rains do not occur to put the soil in working order, seeding will have to be postponed until early spring. A satisfactory method of seeding grass is with small grain in the fall. However, the seeding date for small grain is too late for clover, so this should be seeded the following spring. The best method of seeding clover on grain in the spring is to mix the seed with a small amount of dry lime or fertilizer and put through the fertilizer section of the grain drill. The discs will go in the ground just enough to cover the seed well.

#### SOIL EROSION DEPARTMENT

The Soil Erosion division has worked out to date 53 Cooperative Agreements on as many farms, totaling 7562 acres of land. On these farms, 2415 acres will be terraced and 379.5 acres will be strip cropped. 247.5 total acres will be removed from cultivation. Of these, 205.5 acres of land will go into pasture land. 42 acres will go back into woodland. In carrying out the Farm Management plans of this department, 4853 rods of fence will be constructed in rearranging farms. This department will make good progress in signing up Cooperative Agreements when the full staff is secured.

ENGINEERING DEPARTMENT

The accomplishments of this division have been mounting steadily. Where last month we were talking about our aims, we can now point out our accomplishments, and at the same time bigger things.

Through Friday, August 24, we had mapped the boundaries on 1092 farms, a total of 130,198 acres. This leaves us less than 20,000 acres to map before the project area is completely covered. Our terracing crews have laid out and constructed 123,400 feet of terrace, benefiting 218 acres on 13 different farms. All of the landowners that have received this service are enthusiastic supporters.

The boys from the camp have built 808 check dams, in gullies and terrace outlet channels. A small amount of gully bank sloping, preparatory to planting to shrubs, vines, trees and grasses, has been done.

The work of our Drafting department is well underway, and they are prepared to take care of all the drawing that the various departments require.

We have been called on to help lay out improvements on two school grounds. Although, none of us claim to be landscape architects, we are gladly lending a hand and doing our little best to gain the desired results. We feel that any work for improvement of the community is a benefit to the project as a whole.

Plans are being made to put on a "training squad." These trainees, practically all college men, will be given a few weeks of training on each phase of our work. These men are expected to develop into valuable men to the project as our work expands.

As the farmers on the area get a chance to watch the new terraces act in rains, we are getting more requests for terracing than we can care for. To answer these demands, we are putting our equipment on double shifts and running it fourteen hours a day. More equipment is expected in the near future, and we are looking forward to a busy fall.

FORESTRY DEPARTMENT

Establishes Nursery - The Forestry department is glad to announce that we now have a nursery of our own on Project No. 22. Although small, this nursery should grow a lot of trees and will be of great value as an emergency supply in case of unexpected shortage in delivery of trees from other sources. The principal species that will be grown are Loblolly pine, Shortleaf pine and Yellow poplar. For experiment, various other species will be grown, in a continuous effort to discover those types of trees best fitted to aid in checking soil erosion. This nursery, which comprises about 3 acres, is located one and three-fourth miles south of Chatham on the east side of Highway No. 29, just beyond the intersection of Highway No. 29 and Cherrystone Creek. Now that the establishment of the nursery is well underway, and a foreman has been employed to supervise this work, the foresters will be in a position from now on to give their undivided attention to the inspection of farms in this area.

### SOILS DEPARTMENT

The Soils department has surveyed 125 farms, making a total of 22, 114 acres. The soil types, erosion conditions, and slopes found in the open fields have been mapped on these 125 farms. During August we completed the survey on 39 farms.

Mr. F. F. Nickels, assisted by E. P. Hay, is making a reconnaissance Erosion Survey of the state of Virginia. In every state, men are occupied with making this survey, from which a detailed report will be made and presented to the President of the United States, in order to acquaint him with conditions relating to the Soil Erosion Service. Thus far, Mr. Nickels reports 4 counties completed in the Virginia State Reconnaissance.

### SES - ECW CAMP NO. 1 NEWS

In order that the public may have a better idea of what the E.C.W. enrollees and supervisory personnel are doing, the following report of accomplishments is submitted:

Work of primary importance which heads the list, is a construction of permanent and temporary soil check dam structures, in terrace outlet water channels, and eroded gullies. Grass, honeysuckle, and thousands of black locust trees will be planted in the gullies, within the next twelve months, to hold the soil.

Since June 21, 1800 logs, wire, brush, rock and rubble masonry check dams have been constructed in the gullies on a number of farms. It is estimated that over 4000 soil check dams will be constructed in the area during the months of September and October. In addition to dam work, several crews are now engaged in sloping gully banks.

On the evening of August 17, a delightful dance was given by the 378th Company of C.C.C. in the American Legion ball room at Danville, Virginia, with music by the Price-Fowler orchestra. During intermission, a floor show was presented by Danville and Schoolfield entertainers.

Col. K. D. Smith, District Supervisor of the C.C.C. Camps in Virginia, spent the night at camp, August 27.

Winter quarters for the C.C.C. and supervisory personnel are under construction. There will be five barracks, a recreation hall, and a building which will serve for the supervisory personnel quarters.

### SHEET EROSION

The thief of the fields - This form of erosion commonly goes unnoticed until a great deal of damage has been done. It is the forerunner of gullies. When the fertile top soil has gone, the rate of washing is greatly accelerated. Water runs quickly, due to its inability to penetrate the soil. Sooner or later it concentrates at some point and then a gully is formed. As a general thing, sheet erosion has "bled the fields white" before the gullies occur. This form of erosion might well be named, "the thief of the fields."

STRIP CROPPING

This form of erosion control is a new departure, although it has been practiced in one form or another by occasional farmers for a number of years. It may be grouped under two heads, "Crop Stripping" and "Field Stripping." The former consists of seeding narrow strips of some thick growing crops at intervals along contour lines in a large field. For example, a strip of a few rows of sorghum is sometimes seeded in a summer grown crop. The latter may be designated as field stripping. That is, the farm is laid out in long narrow fields, crossways the line of crop. The general term, crop stripping, may mean either or both of these practices. Under conditions where it may be practical, strip cropping is an effective means of erosion control. It is well suited to a general farming region where hay is an important feature of farming system. The principle can be adapted to fit a great variety of conditions. Strip cropping can be practiced on any degree of slope that can be cultivated. One of the essentials for success is the necessity for having the fields or strips laid out as nearly as practical on contour lines. There are a few things connected with soil erosion that may be accepted as established facts. One is, the longer the slope, other things being equal, the greater the degree of erosion.

The chief object of strip farming is to check the momentum of the run off, filter out the soil carried by the water and increase the absorption of rain water of the slopes. This is done by growing, in alternate strips, some erosion resisting crops, such as clover and grass, or lespedeza and grass with clean cultivated crops like corn and tobacco. Erosion usually takes a heavy toll of the soil when the land is bare at seeding time. Broadcast crops, which allow the soil to wash badly at seeding time, usually take care of the situation when they become established. Thus alternating crops which have a different seeding date would do much to save the soil on erosive slopes. Some of the advantages of strip cropping over other means of erosion control are:

1 - It can be put into practice by anyone without any great initial cost. 2 - The boundary lines of fields or strips do not have to be laid out with such engineering exactness as terraces, but as nearly as possible they should follow contour lines. 3 - In some cases it is more economical, since long narrow fields require somewhat less labor to farm than do square ones of the same area. 4 - There are no obstructions to interfere with the use of machinery. 5 - Strip cropping need not change the farming system, it can adapt itself to rotations, some of which may not now be in use. 6 - Strip cropping may be used with and is an excellent supplement to terracing.

Some of the disadvantages are:

1 - Difficulty in arranging fields and fences where strip cropping has not been in use. 2 - Where livestock raising is practiced some grazing may be lost unless the strips are fenced. 3 - It may prevent straight rows on irregular slopes. 4 - It will not entirely control erosion on the steeper slopes, although it will be an aid under all conditions.

Width of the strips: This depends somewhat on the area considered. The local conditions plus an application of horse sense will go a long way in determining this factor. The more erosive the soil and the steeper the slope, the closer together the strips should be. Crops should be used that are needed on the farm or have a market value. Although an unprofitable

crop may be used and justified if there is no other means of stopping erosion. In field stripping, the fields should be of uniform width, or as nearly as possible. Generally as many strips should be considered as there are years in rotation, or multiples of that number. For instance, 12 fields could be used in a 4-year rotation. Leaving 2 adjoining fields bare is a bad practice and should be avoided. Cultivation of the crops should be lengthwise of the field. A strip of sod at the end of the field for turning around and for passing to and from work is highly desirable. Permanent grass covered canals to take care of the established run off should often be left. They will repay the effort of lifting plows over them.

#### YOUR PART OF THE PLAN

The farmer is expected to furnish labor and teams to build terraces and fills where terraces cross ditches, and to farm with the terraces instead of up and down the hill. To plant trees and grasses furnished him and to maintain and protect them from fire. Fire ruins timber and destroys protective covering. It also robs the soil of organic matter. Fences, terraces, ridges and other structures should be maintained.

#### ARRIVALS AND DEPARTURES

Visitors from High Point, N.C., project include Dr. J. H. Stallings, Regional Director, P. F. Keil, Assistant Regional Director, E. R. Rainey, Chief Engineer, and Miss Hattie Cook. Mr. Keil has remained with us in the role of Acting Assistant Regional Director. Best wishes, Mr. Keil.

Mr. G. L. Fuller, Chief Erosion Specialist, and E. V. Jotter, Chief Forester, have been in the office several times during the past month for conferences with their respective departments.

Mr. F. F. Nickels, Soils Expert in charge, and E. P. Hay have started the State Reconnaissance.

W. A. Jeter, Seed Inspector, has returned to his home in Roanoke, Va.

S. L. Joffords, Assistant Regional Director, Spartanburg, S. C., project has returned to his home office. Many thanks for your aid, and the best of luck to you, Mr. Joffords.

Mr. J. B. Pike, Jr., Chief Forester, and T. L. Copley, Chief Agronomist visited the N. C. and S. C. projects during the past month.

Mr. T. B. Hutcheson, Director Extension Division, and Prof. Chas. E. Scitz, have been frequent visitors during August.

Mr. S. F. Grubbs, Chief Soil Erosion Specialist, has returned to the office and we are glad to have Mr. Grubbs back again.

#### PERMANENT STAFF MEMBERS

Dr. J. H. Stallings, Acting Regional Dir.	Mr. J. K. Alvis, Engineer
Mr. P. F. Keil, Acting Asst. " "	Mr. W. G. Nunn, Asst. Engineer
Mr. J. P. Crawford, Chief Clerk	Mr. T. H. Garrett, Jr. Engineer
Mr. B. D. Bennett, Asst. Chief Clerk	Mr. E. H. Howard, Chief Draftsman
Mr. A. B. Motley, Warehouseman	Mr. S. F. Grubbs, " Eros. Spec.
Mr. T. L. Copley, Chief Agronomist	Mr. T. C. Maurer, Asst. " "
Mr. J. B. Pike, Jr., Chief Forester	Mr. F. F. Nickels, Acting Soils Chief
Mr. O. W. Price, Asst. Forester	Dr. A. J. Baur, Soils Expert
	Mr. E. F. Goldston, Soils Expert